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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/022,436

12/12/2001

Timothy B. Cowles

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4282

7590

06/22/2004

Charles Brantley
Micron Technology, Inc.
8000 S. Federal Way
Boise, ID 83716

EXAMINER

TU, CHRISTINE TRINH LE

ART UNIT

PAPER NUMBER

2133

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,436

Applicant(s)

COWLES ET AL.

Examiner

Christine T. Tu

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-54 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-6 and 10-12, drawn to method of testing memory, classified in class 714, subclass 718.
 - II. Claims 7-9, drawn to method of repairing a memory die by reconfiguring an electrical communication path, classified in class 714, subclass 5.
 - III. Claims 13-22, drawn to a method of processing a memory die by re-routing electrical communication path of the die, classified in class 326, subclass 47.
 - IV. Claims 23-25, drawn to a method of operating an electronic system having a feature of initiating a power management mode, classified in class 365, subclass 226.
 - V. Claims 26-32, drawn to a method of operating memory having data-in and data-out comparison, classified in class 714, subclass 719.
 - VI. Claims 33-36, drawn to a method of preparing a memory circuit having particular memory elements being isolated, classified in class 326, subclass 16.
 - VII. Claims 37-40, drawn to a method of in-field programming of an electronic circuit, classified in class 365, subclass 96.
 - VIII. Claims 41-46, drawn to an electronic system with control circuitry, classified in class 714, subclass 723.

Art Unit: 2133

- IX. Claims 47-48, drawn to a memory package (layout), classified in class 326, subclass 101.
- X. Claims 49-52, drawn to a memory module (layout) with blowing unprogrammed program element on any die, classified in class 326, subclass 47.
- XI. Claims 53-54, drawn to a motherboard (layout), classified in class 326, subclass 101.

2. The inventions are distinct, each from the other because of the following reasons:

3. Inventions I, II, III and IV, V and VI, VII, VIII, IX, X and XI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable.

In the instant cases as follows:

- a. invention I has separate utility such as testing a memory die; this is a patentably distinct feature not found in inventions II to XI;
- b. invention II has separate utility such as reprogramming a memory die having feature of reconfiguring an electrical communication path within the memory die; this is a patentably distinct feature not found in inventions I, III-XI;

Art Unit: 2133

- c. invention III has separate utility such as a method of operating a memory having a feature of initiating a power management mode; this is a patentably distinct feature not found in inventions I-II and IV-XI;
- d. invention IV also has separate utility such as initiating a power management mode; this also is a patentably distinct feature not found in inventions I, II, III, and V-XI.
- e. invention V has separate utility such as data-in and data-out comparison in memory testing; this also is a patentably distinct feature not found in inventions I, II, III, IV and VI-XI;
- f. invention VI has separate utility such as a method of preparing a memory circuit having particular memory elements being isolated; this is a patentably distinct feature not found in inventions I-V and VII-XI;
- g. Invention VII has separate utility such as a method of in-field programming of an electronic circuit; this is a patentably distinct feature not found in inventions I-VI and VIII-XI;
- h. Invention VIII has separate utility such as a memory system with control circuitry; this is a patentably distinct feature not found in inventions I-VII and IX-XI;
- i. Invention IX has separate utility such as a memory package (layout); this is a patentably distinct layout not found in inventions I-VIII and X-XI;

Art Unit: 2133

j. Invention X has separate utility such as a memory module (layout) with a blowing unprogrammed program element on any die; this is a patentably distinct layout not found in inventions I-IX and XI;

k. Invention XI has separate utility such as a mother board; this is a patentably distinct motherboard not found in inventions I-X.

See MPEP § 806.05(d).

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

6. In order to expedite the prosecution for the subject application, the non-elected claims should be canceled in response to this office action.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

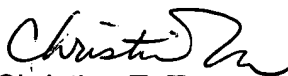
Art Unit: 2133

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Tu whose telephone number is (703)305-9689. The examiner can normally be reached on Mon-Thur. 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (703)305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Christine T. Tu
Primary Examiner
Art Unit 2133

June 1
7, 2004